

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL claim 13 and AMEND claims 1 and 3 in accordance with the following:

1. (CURRENTLY AMENDED) An image display control unit which displays an image on a display screen, said control unit comprising:

a screen size information obtaining section obtaining information on a display size on the whole of said display screen;

an image information obtaining section obtaining information on vertical and horizontal sizes of said image;

an arithmetic section calculating an image magnification ratio so that at least one of said vertical and horizontal sizes of said image substantially conforms with at least one of vertical and horizontal display sizes on the whole of said display screen;

a first storing section associating the image magnification ratio calculated by said arithmetic section and display position information on a location of said image on the display screen with said image and retaining display information in which the image magnification ratio, the display position information and as associated with said image are associated; and

a display control section confirming whether said image is stored in said first storing section when said image is to be displayed on said display screen and displaying, if the result of the confirming is negative, said image at the image magnification ratio, which has been stored in said first storing section, on said display screen, and obtaining, if the result of the confirming is positive, the display position information from the first storing section and displaying the location of the image as indicated by the display position information at the image magnification ratio on said display screen.

2. (ORIGINAL) An image display control unit according to claim 1, wherein said arithmetic section calculates image magnification ratios for when said vertical size of said image is set to substantially conform with said vertical display size of said display screen and for when said horizontal size of said image is set to substantially conform with said horizontal display size

of said display screen, and selects the larger one of the calculated vertical and horizontal magnification ratios and outputs the selected magnification ratio to said display control section.

3. (CURRENTLY AMENDED) An image display control unit which displays an image on a display screen, said control unit comprising:

a character size detecting section obtaining a character size used most frequently in said image;

an arithmetic section calculating a magnification ratio of said image on the basis of the character size so that said character in said image is displayed at a predetermined size on said display screen;

a first storing section associating the image magnification ratio calculated by said arithmetic section and display position information on a location of said image on the display screen with said image and retaining display information in which the image magnification ratio, the display position information and as associated with said image are associated; and

a display control section confirming whether said image is stored in said first storing section when said image is to be displayed on said display screen and displaying, if the result of the confirming is negative, said image at the image magnification ratio, which has been stored in said first storing section, on said display screen, and obtaining, if the result of the confirming is positive, the display position information from the first storing section and displaying the location of the image as indicated by the display position information at the image magnification ratio on said display screen.

4. (ORIGINAL) An image display control unit according to claim 3, wherein said predetermined size is height of said character.

5. (ORIGINAL) An image display control unit according to claim 3, wherein said predetermined size is the number of pixels for the character of height.

6. (ORIGINAL) An image display control unit according to claim 3, wherein said predetermined size is a field angle in a character height direction.

Claims 7-13 (CANCELED)

14. (PREVIOUSLY PRESENTED) An image display control unit according to claim 2, further comprising a second storing section associating display position information, on location of said image on the display screen, with said image and retaining the associated display position information.

15. (PREVIOUSLY PRESENTED) An image display control unit according to claim 3, further comprising a second storing section associating display position information, on location of said image on the display screen, with said image and retaining the associated display position information.

16. (PREVIOUSLY PRESENTED) An image display control unit according to claim 4, further comprising a second storing section associating display position information, on location of said image on the display screen, with said image and retaining the associated display position information.

17. (PREVIOUSLY PRESENTED) An image display control unit according to claim 5, further comprising a second storing section associating display position information, on location of said image on the display screen, with said image and retaining the associated display position information.

18. (PREVIOUSLY PRESENTED) An image display control unit according to claim 6, further comprising a second storing section associating display position information, on location of said image on the display screen, with said image and retaining the associated display position information.

19. (CURRENTLY AMENDED) An image display control unit according to claim 1, further comprising a second storing section associating display position information, on location of said image on the display screen, with said image and retaining the associated display position information.

Claims 20-24 (CANCELED)

25. (ORIGINAL) An image display control unit according to claim 13, wherein said second storing section associates a display magnification of said image, which is displayed on said display screen, with said image and stores the associated magnification ratio.

26. (ORIGINAL) An image display control unit according to claim 14, wherein said second storing section associates a display magnification of said image, which is displayed on said display screen, with said image and stores the associated magnification ratio.

27. (ORIGINAL) An image display control unit according to claim 15, wherein said second storing section associates a display magnification of said image, which is displayed on said display screen, with said image and stores the associated magnification ratio.

28. (ORIGINAL) An image display control unit according to claim 16, wherein said second storing section associates a display magnification of said image, which is displayed on said display screen, with said image and stores the associated magnification ratio.

29. (ORIGINAL) An image display control unit according to claim 17, wherein said second storing section associates a display magnification of said image, which is displayed on said display screen, with said image and stores the associated magnification ratio.

30. (ORIGINAL) An image display control unit according to claim 18, wherein said second storing section associates a display magnification of said image, which is displayed on said display screen, with said image and stores the associated magnification ratio.

31. (ORIGINAL) An image display control unit according to claim 19, wherein said second storing section associates a display magnification of said image, which is displayed on said display screen, with said image and stores the associated magnification ratio.

Claims 32-36 (CANCELED)

37. (PREVIOUSLY PRESENTED) An image display control unit according to claim 1, further comprising a scroll processing section scrolling said image on said display screen.

38. (PREVIOUSLY PRESENTED) An image display control unit according to claim 3, further comprising a scroll processing section scrolling said image on said display screen.

39. (ORIGINAL) An image display control unit according to claim 1, wherein an index image, which is produced by reducing an original image, is displayed as said image on said display screen as said image.

40. (ORIGINAL) An image display control unit according to claim 3, wherein an index image, which is produced by reducing an original image, is displayed as said image on said display screen as said image.

41. (PREVIOUSLY PRESENTED) An image display control unit according to claim 39, further comprising a third storing section associating position information, on location of an image to be displayed, with the original image and retaining the associated position information.

42. (PREVIOUSLY PRESENTED) An image display control unit according to claim 40, further comprising a third storing section associating position information, on location of an image to be displayed, with the original image and retaining the associated position information.

43. (CURRENTLY AMENDED) An image display control method of displaying an image on a display screen for an image displaying apparatus, said control method comprising: ~~a screen size information obtaining step of~~

~~obtaining information on a display size on the whole of said display screen; an image information obtaining step of~~

~~obtaining information on vertical and horizontal sizes of said image; an arithmetic step of calculating an image magnification ratio so that at least one of said vertical and horizontal sizes of said image substantially conforms with at least one of vertical and horizontal display sizes on the whole of said display screen; a storing step of~~

~~associating the image magnification ratio and display position information on a location of said image on the display screen with said image; and~~

~~retaining the image magnification ratio and the display position information on the location of said image on the display screen as associated with said image; and a display control step of~~

confirming whether said image is stored in said first storing section when said image is to be displayed on said display screen;

displaying, if the result of said confirming is negative, said image at the image magnification ratio on said display screen;

obtaining, if the result of said confirming is positive, the display position information; and displaying the location of the image as indicated by the display position information at the image magnification ratio on said display screen.

44. (ORIGINAL) An image display control method according to claim 43, wherein, in said arithmetic step, said image magnification ratio is calculated for when said vertical size of said image is set to substantially conform with said vertical display size of said display screen and for when said horizontal size of said image is set to substantially conform with said horizontal display size of said display screen, and the larger magnification ratio is selected from the calculated vertical and horizontal magnification ratios.

45. (CURRENTLY AMENDED) An image display control method of displaying an image on a display screen, said control method comprising: ~~a character size detecting step of~~

~~obtaining a character size used most frequently in said image; an arithmetic step of calculating a magnification ratio of said image on the basis of the detected character size so that said character in said image is displayed at a predetermined size on said display screen; a storing step of~~

associating the magnification ratio and the display position information on a location of said image on the display screen with said image; and

retaining the magnification ratio and the display position information on the location of said image on the display screen as associated with said image; and a display control step of confirming whether said image is stored in said first storing section when said image is to be displayed on said display screen;

displaying said image at the magnification ratio on said display screen;
obtaining, if the result of said confirming is positive, the display position information; and displaying the location of the image as indicated by the display position information at the image magnification ratio on said display screen.

46. (CURRENTLY AMENDED) An image displaying apparatus comprising:

- a display screen for displaying an image;
- a screen size information obtaining section for obtaining information on a display size on the whole of said display screen;
- an image information obtaining section for obtaining information on vertical and horizontal sizes of said image;
- an arithmetic section for calculating an image magnification ratio so that at least one of said vertical and horizontal sizes of said image substantially conforms with at least one of vertical and horizontal display sizes on the whole of said display screen;
- a storing step-of-section associating the image magnification ratio calculated by said arithmetic section and display position information on a location of said image on the display screen with said image and retaining display information in which the image magnification ratio, the display position information and as associated with said image are associated; and
- a display control section-for confirming whether said image is stored in said first storing section when said image is to be displayed on said display screen and displaying, if the result of the confirming is negative, said image at the image magnification ratio, which has been stored in said first storing section, on the display screen, and obtaining, if the result of the confirming is positive, the display position information from the first storing section and displaying the location of the image as indicated by the display position information at the image magnification ratio on said display screen.

47. (ORIGINAL) An image displaying apparatus according to claim 46, wherein said arithmetic section calculates said image magnification ratio for when said vertical size of said image is set to substantially conform with said vertical display size of said display screen and for when said horizontal size of said image is set to substantially conform with said horizontal display size of said display screen, and selects the larger one of the calculated vertical and horizontal magnification ratios and outputs the selected magnification ratio to said display control section.

48. (CURRENTLY AMENDED) An image displaying apparatus comprising:

- a display screen displaying an image;
- a character size detecting section obtaining a character size used most frequently in said image;

an arithmetic section calculating an image magnification ratio of said image on the basis of the detected character size so that said character is displayed at a predetermined size on said display screen;

a storing step-of-section associating the image magnification ratio calculated by said arithmetic section and display position information on a location of said image on the display screen with said image and retaining display information in which the image magnification ratio, the display position information and as associated with said image are associated; and

a display control section confirming whether said image is stored in said first storing section when said image is to be displayed on said display screen and displaying, if the result of the confirming is negative, said image at the image magnification ratio, which has been stored in said first storing section, on said display screen, and obtaining, if the result of the confirming is positive, the display position information from the first storing section and displaying the location of the image as indicated by the display position information at the image magnification ratio on said display screen.

49. (CURRENTLY AMENDED) An image display control program recorded computer-readable recording medium which retains an image display control program for making a computer implement an image display control function to display an image on a display screen of an image displaying apparatus, said image display control program making the computer function as:

a screen size information obtaining section for-obtaining information on a display size on the whole of said display screen;

an image information obtaining section for-obtaining information on vertical and horizontal sizes of said image;

an arithmetic section for-calculating an image magnification ratio so that at least one of said vertical and horizontal sizes of said image substantially conforms with at least one of vertical and horizontal display sizes on the whole of said display screen;

a storing step-of-section associating the image magnification ratio calculated by said arithmetic section and display position information on a location of said image on the display screen with said image and retaining display information in which the image magnification ratio, the display position information and as associated with said image are associated; and

a display control section-for confirming whether said image is stored in said first storing section when said image is to be displayed on said display screen and displaying, if the result of the confirming is negative, said image at the image magnification ratio, which has been stored in

said first storing section, on said display screen, and obtaining, if the result of the confirming is positive, the display position information from the first storing section and displaying the location of the image as indicated by the display position information at the image magnification ratio on said display screen.

50. (ORIGINAL) An image display control program recorded computer-readable recording medium according to claim 49, wherein said arithmetic section calculates said image magnification ratio for when said vertical size of said image is set to substantially conform generally with said vertical display size of said display screen and for when said horizontal size of said image is set to substantially conform with said horizontal display size of said display screen, and to select the larger one of the calculated vertical and horizontal magnification ratios for outputting the selected magnification ratio to said display control section.

51. (CURRENTLY AMENDED) An image display control program recorded computer-readable recording medium which retains an image display control program for making a computer implement an image display control function to display an image on a display screen of an image displaying apparatus, said recording medium making said computer function as:

a character size detecting section for obtaining a character size used most frequently in said image;

an arithmetic section for calculating an image magnification ratio of said image on the basis of the detected character size so that said character is displayed at a predetermined size on said display screen;

a storing step of section associating the image magnification ratio calculated by said arithmetic section and display position information on a location of said image on the display screen with said image and retaining display information in which the image magnification ratio, the display position information and as associated with said image are associated; and

a display control section for confirming whether said image is stored in said first storing section when said image is to be displayed on said display screen and displaying, if the result of the confirming is negative, said image at the image magnification ratio, which has been stored in said first storing section, on said display screen, and obtaining, if the result of the confirming is positive, the display position information from the first storing section and displaying the location of the image as indicated by the display position information at the image magnification ratio on said display screen.

52. (CURRENTLY AMENDED) An image display control method of displaying an image on a display screen for an image displaying apparatus, said control method comprising:
- obtaining information on a display size on the whole of the display screen;
 - obtaining information on vertical and horizontal sizes of the image;
 - calculating an image magnification ratio so that at least one of the vertical and horizontal sizes of the image substantially conforms with at least one of vertical and horizontal display sizes on the whole of the display screen;
 - associating the magnification ratio and the display position information on a location of said image on the display screen with said image; and
 - retaining the magnification ratio and the display position information on the location of said image on the display screen as associated with said image; and
 - confirming whether said image is stored in said first storing section when said image is to be displayed on said display screen;
 - displaying the image at the magnification ratio on said display screen;
 - obtaining, if the result of said confirming is positive, the display position information; and
 - displaying the location of the image as indicated by the display position information at the image magnification ratio on said display screen.

53. (CURRENTLY AMENDED) An image display control method of displaying an image on a display screen, comprising:
- obtaining a character size used most frequently in the image;
 - calculating a magnification ratio of the image on the basis of the detected character size so that the character in the image is displayed at a predetermined size on the display screen;
 - associating the magnification ratio and the display position information on a location of said image on the display screen with said image; and
 - retaining the magnification ratio and the display position information on the location of said image on the display screen as associated with said image; and
 - confirming whether said image is stored in said first storing section when said image is to be displayed on said display screen;
 - displaying the image at the magnification ratio on said display screen;
 - obtaining, if the result of said confirming is positive, the display position information; and
 - displaying the location of the image as indicated by the display position information at the image magnification ratio on said display screen.

REMARKS

In the Office Action Summary of the April 1, 2005 Office Action, the Examiner indicated that claims 1-53 were pending in the application, while in the Detailed Action, it was indicated that claims 1-6, 13-19, 25-31 and 37-51 were pending. In fact, claims 1-6, 13-19, 25-31 and 37-53 were pending in the application after entry of the January 21, 2005 Amendment. In the April 1, 2005 Office Action, claims 1-6, 13-19, 25-31 and 37-53 were rejected under 35 USC § 103. In rejecting the claims, the following U.S. Patents were cited: 5,717,939 to Bricklin et al.; 5,793,350 to Chandavarkar et al.; 6,388,638 to Fukushima et al. (References A (p.1), H (p.2) and K (p.2), respectively, in the June 6, 2003 Office Action); 5,809,183 to Serizawa et al. (Reference A in the May 19, 2004 Office Action); and 6,549,214 to Patel et al. (Reference J in the April 1, 2005 Office Action). Claim 13 has been canceled and thus, claims 1-6, 14-19, 25-31 and 37-53 remain in the case. The Examiner rejections are traversed below.

Claims 1 and 3 have been amended to incorporate limitations of claim 13 and how the information recited therein is used, as described on pages 50-55. As now recited therein, the first storing section stores "display information in which the image magnification ratio, the display position information and said image are associated" (e.g., claim 1, lines 12-14). In rejecting claim 13, Bricklin et al. was cited as disclosing a "scale factor, together with the original stroke descriptors, ... stored in memory as the data content of the target cell at block 2240" (column 18, lines 2-4). In addition, column 11, lines 57-59 were cited as disclosing "'descriptors', ... [as] the 'pen down' event, 'pen down' coordinates, 'pen up' event, 'pen up' coordinates, intervening 'deltas', and 'stroke bounds for each stroke forming part of an entry'" (column 11, lines 57-60). It is submitted that this is not what is recited in claims 1 and 3.

However, nothing has been cited or found in any of the references used to reject the claims, that suggests "confirming whether said image is stored in said first storing section when said image is to be displayed on said display screen" (claim 1, lines 15-16), so that "if the result of the confirming is negative, said image [is displayed] at the image magnification ratio which has been stored in said first storing section" (e.g., claim 1, lines 16-18), while "if the result of the confirming is positive, the display position information [is obtained] from the first storing section ... [for] displaying the location of the image as indicated by the display position information at the image magnification ratio on said display screen" (e.g., claim 1, last four lines), as described, e.g., in the paragraph spanning pages 52 and 53. Therefore, it is submitted that claims 1 and 3, as well as claims 2, 4-6, 14-19, 25-31 and 37-42 which depend therefrom, patentably distinguish over the applied art.

The remaining independent claims, claims 43, 45, 46, 48, 49 and 51-53 have been amended to recite limitations similar to those discussed above with respect to claims 1 and 3. Therefore, it is submitted that claims 43, 45, 46, 48, 49 and 51-53, as well as claims 44, 47 and 50 which depend from claims 43, 46 and 49, patentably distinguish over the applied art.

Summary

It is submitted that the references cited by the Examiner, taken individually or in combination, do not teach or suggest the features of the present claimed invention. Thus, it is submitted that claims 1-6, 14-19, 25-31 and 37-53 are in a condition suitable for allowance. Entry of the Amendment, reconsideration of the claims and an early Notice of Allowance are earnestly solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 7/1/05

By: Richard A. Gollhofer
Richard A. Gollhofer
Registration No. 31,106

1201 New York Avenue, NW, Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501